

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE		3. REPORT TYPE AND DATES COVERED MONOGRAPH
4. TITLE AND SUBTITLE False Prophets: The Myth of Maneuver Warfare and the Inadequacies of FMFM-1 WARFIGHTING			5. FUNDING NUMBERS	
6. AUTHOR(S) Major CRAIG A Tucker, USMC				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army CG-SC			10. SPONSORING/MONITORING AGENCY REPORT NUMBER DTIC SELECTED NOV 09 1995 F	
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for Public Release; Distribution is Unlimited			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) See attached				
14. SUBJECT TERMS Marine Corps, DOCTRINE, J.F.C. Fuller, B.H. Liddell Hart, William Lind, Maneuver WARFARE			15. NUMBER OF PAGES 51	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT	

19951107 133

DTIC QUALITY INSPECTED 8

GENERAL INSTRUCTIONS FOR COMPLETING SF 298

The Report Documentation Page (RDP) is used in announcing and cataloging reports. It is important that this information be consistent with the rest of the report, particularly the cover and title page. Instructions for filling in each block of the form follow. It is important to *stay within the lines* to meet optical scanning requirements.

Block 1. Agency Use Only (Leave blank).

Block 2. Report Date. Full publication date including day, month, and year, if available (e.g. 1 Jan 88). Must cite at least the year.

Block 3. Type of Report and Dates Covered. State whether report is interim, final, etc. If applicable, enter inclusive report dates (e.g. 10 Jun 87 - 30 Jun 88).

Block 4. Title and Subtitle. A title is taken from the part of the report that provides the most meaningful and complete information. When a report is prepared in more than one volume, repeat the primary title, add volume number, and include subtitle for the specific volume. On classified documents enter the title classification in parentheses.

Block 5. Funding Numbers. To include contract and grant numbers; may include program element number(s), project number(s), task number(s), and work unit number(s). Use the following labels:

C - Contract	PR - Project
G - Grant	TA - Task
PE - Program Element	WU - Work Unit Accession No.

Block 6. Author(s). Name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. If editor or compiler, this should follow the name(s).

Block 7. Performing Organization Name(s) and Address(es). Self-explanatory.

Block 8. Performing Organization Report Number. Enter the unique alphanumeric report number(s) assigned by the organization performing the report.

Block 9. Sponsoring/Monitoring Agency Name(s) and Address(es). Self-explanatory.

Block 10. Sponsoring/Monitoring Agency Report Number. (If known)

Block 11. Supplementary Notes. Enter information not included elsewhere such as: Prepared in cooperation with...; Trans. of...; To be published in.... When a report is revised, include a statement whether the new report supersedes or supplements the older report.

Block 12a. Distribution/Availability Statement. Denotes public availability or limitations. Cite any availability to the public. Enter additional limitations or special markings in all capitals (e.g. NOFORN, REL, ITAR).

DOD - See DoDD 5230.24, "Distribution Statements on Technical Documents."

DOE - See authorities.

NASA - See Handbook NHB 2200.2.

NTIS - Leave blank.

Block 12b. Distribution Code.

DOD - Leave blank.

DOE - Enter DOE distribution categories from the Standard Distribution for Unclassified Scientific and Technical Reports.

NASA - Leave blank.

NTIS - Leave blank.

Block 13. Abstract. Include a brief (*Maximum 200 words*) factual summary of the most significant information contained in the report.

Block 14. Subject Terms. Keywords or phrases identifying major subjects in the report.

Block 15. Number of Pages. Enter the total number of pages.

Block 16. Price Code. Enter appropriate price code (*NTIS only*).

Blocks 17. - 19. Security Classifications. Self-explanatory. Enter U.S. Security Classification in accordance with U.S. Security Regulations (i.e., UNCLASSIFIED). If form contains classified information, stamp classification on the top and bottom of the page.

Block 20. Limitation of Abstract. This block must be completed to assign a limitation to the abstract. Enter either UL (unlimited) or SAR (same as report). An entry in this block is necessary if the abstract is to be limited. If blank, the abstract is assumed to be unlimited.

FALSE PROPHETS: THE MYTH OF MANEUVER WARFARE AND THE INADEQUACIES OF FMFM-1 WARFIGHTING

A Monograph
By
Major Craig A. Tucker
United States Marine Corps



School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas

Second Term AY 94-95

Approved for Public Release; Distribution is Unlimited

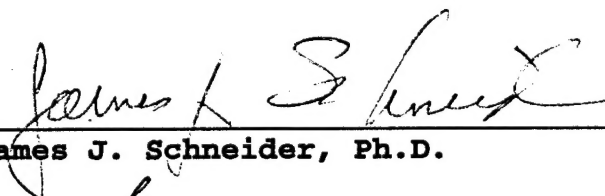
SCHOOL OF ADVANCED MILITARY STUDIES

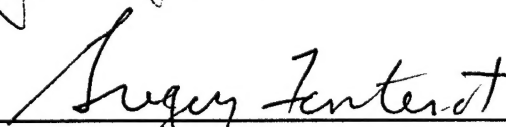
MONOGRAPH APPROVAL

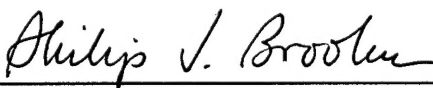
Major Craig A. Tucker

Title of Monograph: False Prophets: The Myth of Maneuver
Warfare and the Inadequacies of FMFM-1
Warfighting

Approved by:


James J. Schneider, Ph.D. Monograph Director


COL Gregory Fontenot, MA, MMAS Director, School of
Advanced Military
Studies


Philip J. Brookes, Ph.D. Director, Graduate
Degree Program

Accepted this 19th Day of May 1995

Accession For	
NTIS CRA&I	<input checked="checked" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution /	
Availability Codes	
Dist	Avail and/or Special
A-1	

ABSTRACT

FALSE PROPHETS: THE MYTH OF MANEUVER WARFARE AND THE INADEQUACIES OF FMFM-1 WARFIGHTING by Major Craig A. Tucker, USMC, 48 pages.

This paper analyzes the doctrine of maneuver warfare promulgated in FMFM-1 Warfighting. This analysis begins by establishing the relationship between military theory and doctrine. Once that foundation is established the author critiques the theoretical origins of maneuver warfare by analyzing the theories of J.F.C. Fuller, B.H. Liddell Hart, Heinz Guderian, and William Lind. This study concludes from that analysis that the foundation of maneuver warfare---the argument that an opponents moral and physical cohesion will always be shattered by a series of rapid and unexpected actions and that once shattered his remnants can be defeated with relative ease---is without any factual basis, cannot be put into practice, and ignores the practical requirements of warfare.

This study then recommends a theoretical construct based on the theories of Hans Delbrueck and Dr. James Schneider to correct those flaws and argues that the strengths of FMFM-1 can be retained in a new doctrine that is considerate of the practical requirements of warfare. The conclusion offers a number of recommendations to guide the writing of a new Marine Corps capstone doctrine.

Introduction

"The Myth of Maneuver Warfare" is a title chosen with deliberate care. The central argument offered in this paper is that the version of maneuver warfare presented in FMFM-1 Warfighting is best described as myth. Since precise and objective definition and the context in which words are used are critical elements of that argument, this paper begins by defining what is meant by "myth."

"Myth" has many connotations, but for our purposes "myth" is defined as a "thing existing only in imagination or whose actuality is not verifiable; a belief given uncritical acceptance by members of a group in support of existing...practices and institutions. [Myth] is ...used to designate a story, belief, or notion commonly held to be true but utterly without a factual basis."¹ In this context myth is opposed to history since it is "usually fabulous in content even when loosely based on historical events."² The classical Greek philosophers contrasted the verb *muthos*, meaning to speak with emotion and mythic thought, with the verb *logos*, meaning to speak with reason and analytical thought. The contrast in meaning defines the qualitative difference between arguments based on emotion and arguments based on logic and reason.³ The thesis of this paper is that maneuver warfare, as defined and limited by FMFM-1 Warfighting, has the substance of myth. In its current form this manual---capstone doctrine of the Marine Corps---speaks with an emotion opposed to history in a document where reason and analysis should prevail.

General A.M. Gray introduced FMFM-1 Warfighting to the U.S. Marine Corps in 1989. In his forward Gray, then Commandant of the Marine Corps, states that FMFM-1 "is the Marine Corps' doctrine and, as such, provides the authoritative basis for how we fight and how we prepare to fight."⁴ This new doctrine had a tremendous, almost revolutionary impact on how the Marine Corps thought about warfighting. An explosion of intellectual fervor permeated the pages of professional journals, Marine Corps schools, tactical exercises and the professional discourse throughout the Marine Corps. Released from the constraints of traditional tactics, Marines thrived on the intellectual flavor of FMFM-1. The tenets of maneuver warfare formed the heart and soul of this new doctrine. The maneuver warfare focus on mission tactics, initiative, and speed of thought and action appealed to Marines of all ranks. Today those elements are still FMFM-1's greatest strengths. General Gray stated explicitly that the purpose of

FMFM-1 is to "provide broad guidance in the form of concepts and values....The thoughts contained here [in FMFM-1] represent not just guidance for actions in combat, but a way of thinking in general. This manual...describes a philosophy for action which...dictates our approach to duty."⁵

FMFM-1's four chapters are, for the most part, strongly written, pertinent, and appropriate to the Marine Corps philosophy and values. The manual constructs a patient, apparently logical and reasoned argument that, given the nature and theory of war, maneuver warfare is the only responsible and intelligent means for conducting war. FMFM-1 successfully inculcated this lesson and the broad philosophical values of maneuver warfare into the psyche of the Marine Corps. In the excitement inspired by change the foundations of the doctrine escaped close scrutiny. Maneuver warfare assumed the aura of absolute truth.

Some Marine officers have begun to question the form of that truth. The more dogmatic precepts of FMFM-1 have come under challenge by those who argue that it is time to move beyond a dogma meant to effect change to a doctrine that can be translated into practice. To challenge dogma, however, smacks of heresy, and those who challenge FMFM-1 are dismissed as heretics. It is the heretics, though, who are speaking the truth.

Neither the prophets nor the acolytes of maneuver warfare recognized the difference between a philosophy that teaches one how to think about warfighting and a doctrine that teaches one how to fight. This difference is one of three fundamental flaws in FMFM-1. The second is that maneuver warfare, as defined and limited by FMFM-1, focuses on ways to the exclusion of means and ends. The third is that the reasoning used in FMFM-1 to justify the form of maneuver warfare used by the Marine Corps lacks intellectual rigor. These three flaws introduce amidst the great strengths of FMFM-1 a fatal virus which, if not corrected, will relegate the Marine Corps' capstone doctrine to the realm of shallow intellectualism and practical irrelevance.

FMFM-1 is very clear that "Marine Corps doctrine today is based on warfare by maneuver...."⁶ The antithesis of warfare by maneuver is attrition warfare, a style of war which maneuverists believe has no place in Marine Corps doctrine. A doctrine based on maneuver is necessary because "an expeditionary force...must be prepared to win quickly, with minimal casualties and limited external support, against a

physically superior foe. This requirement mandates a doctrine of maneuver warfare."⁷ The aim of maneuver warfare is to "render the enemy incapable of resisting by shattering his moral and physical cohesion."⁸ The effects of maneuver warfare will be accomplished through combat power, concentration and speed, surprise and boldness, and the exploitation of vulnerability and opportunity. FMFM-1 does not address what happens if the war is protracted, the foe is not physically superior, the enemy's cohesion is not shattered, political requirements limit the application of combat power, circumstances dictate caution or the enemy is not vulnerable. It does not address what to do if geography, mission, or the skill of an opposing commander prevent the execution of maneuver warfare. FMFM-1 promulgates a doctrine unencumbered by constraints and in the process it becomes a doctrine with limited application to the practical problems of warfare.

All military action is focused toward a purpose. The linkage between the tactical, strategic, and operational levels of war focuses military action towards a political purpose. Each level's purpose supports the purpose of the next higher level and at each level it is purpose which determines means. FMFM-1 discusses this relationship between war and policy in Chapter 1, "The Theory of War."

War does not exist for its own sake. It is an extension of policy with military force. The policy aim that is the motive for war must also be the foremost determinant for the conduct of war. The single most important thought to understand about our theory of war is that war must serve policy. As the policy aims of war may vary from resistance against aggression to complete annihilation of the enemy, so must the application of violence vary in accordance with those aims.⁹

The principle that military action serves policy is then subverted in Chapter 3 "The Conduct of War." Chapter 3, building on Chapter 1 "The Nature of War," and Chapter 2 to define and justify a doctrine of maneuver warfare, states in the lead paragraph that

The sole justification for the United States Marine Corps is to secure or protect national policy objectives by military force when peaceful methods cannot. How the Marine Corps proposes to accomplish this mission is the product of our understanding of the nature and theory of war and must be the guiding force behind our preparation for war.¹⁰

This passage is fallacy disguised as truth. The military accomplishes national policy objectives by combining "means"---the resources available---with "ways"---methods applicable to a given military situation---to achieve a military "end" linked to the policy objective. How the Marine Corps accomplishes assigned missions, the military "ways" and "means" used to achieve policy objectives, will not be determined by the nature or theory of war. Ways and means are determined by the objective of policy; by the nature of the terrain, by the skills and weaknesses of the enemy; and by any number of additional constraints that comprise the practical aspects of war. Ways and means will be determined least of all by the Marine Corps' desire to fight a war of maneuver.

In theory, a doctrine that limits the ways available to the Marine Corps also limits the purposes for which the Marine Corps can be used. That theory is not only unrealistic, it turns the operational level of war on its head by specifying the ways to be used and then limiting the situations in which those ways are appropriate before a purpose is even defined. In practice, the Marine Corps will be used across the spectrum of conflict, situations, and geography. In practice, the ways used by the Marine Corps will be determined by any or all of the constraints already mentioned. Marine Corps doctrine must address those possibilities from both an intellectual and a practical perspective.

This is not to denigrate the value of understanding the nature and theory of war. An objective understanding of the theory and nature of war provides an intellectual foundation for understanding what is possible given the practical realities of war. In that role theory is critical to doctrine. Theory can be misused however, and when theory is grounded in the distortion of fact it becomes the dangerous justification for myth.

The Relationship of Theory to Doctrine

Any discussion of military theory must begin first with an attempt to define the term than with an attempt to define its purpose. Webster's defines theory as "the analysis of a set of facts in their relation to one another; the general or abstract principles of a body of fact, a science, or an art."¹¹ This provides us a starting point. To establish a theory, one must first determine a set of facts then analyze how those facts interrelate to discover patterns that forecast behavior. If patterns emerge which consistently suggest a reliable cause and effect, those patterns become principles: the foundation of theory. Theory can then be used to explain behavior and, given the continued existence of its principles, forecast future behavior. In science and nature, where behavior follows immutable laws, the theorist's role is to discover those laws and then examine their behavior. In military theory the process of discovery is much more difficult. Behavior is abstract and much of the cause and effect results not from the laws of nature but from human conceptualization.¹² The introduction of this human element into military theory requires the military theorist to temper any discovery of principles with the knowledge acquired through personal experience and professional study. Reliable cause and effect must still form the intellectual foundation for any military theory--a theory which cannot demonstrate reliable cause and effect is not a valid theory---but the military theorist understands that the principles are not immutable.

Dr. Jim Schneider, Professor of Military Theory at the U.S. Army's School for Advanced Military Studies, defines military theory as "a reliable system of beliefs, causally sustained and justified by professional and personal understanding about the nature of war."¹³ This definition, encompassing all of the factors discussed above, is the definition of military theory used in this paper.

The writings of Carl von Clausewitz and Henri Jomini form the foundation of much modern military theory. Both believed that military theory served a purpose, but their views on the nature of that purpose differ dramatically. Jomini believed that military theory was prescriptive---the principles derived from theory identified the factors which would result in victory. Clausewitz believed that military theory was an analytical tool---theory provided the commander with the means necessary to "analyze the situation and its potentialities... without instructing him specifically what to do or dictating solutions."¹⁴

For Clausewitz, there is no relationship between military theory and doctrine. For Jomini, military theory prescribes doctrine. Both points of view require further analysis.¹⁵

Clausewitz believed that the purpose of theory was to provide the commander an analytical tool he could use to understand war and the conduct of war. The validity of a theory, constructed by “identifying the variables of war and establishing their interrelations,”¹⁶ is determined by its ability to explain the nature of war. Since Clausewitz believed that the function of theory is explicative rather than applicative, theory does not belong on the battlefield. Theory identifies and establishes the relationships among the elements of a given military situation without assigning a relative weight to each element. Relative weight is determined by the commander, not by theory, and is dependent upon the commander’s perception of the situation. The principles derived from theory provide the commander with a conceptual framework that can guide his decision making, but the principles do not provide guidance on which decision to make. For Clausewitz, theory has served its purpose when it provides the commander with “insight into the great mass of phenomena and of their relationships”¹⁷ while leaving him free “to rise to the higher realms of action”¹⁸ unencumbered by prescriptive formulas that dictate those actions.¹⁹

Jomini believed that a theory of war would produce principles similar to those found in scientific theory. The cause and effect relationships among the elements of war could be expressed as a system of laws which would serve the commander in practice. Jomini set out to develop a theory that would accompany the commander to the battlefield in the form of principles that, if applied properly, resulted in victory. For Jomini, theory---knowledge for the purpose of application---is valid if it achieves results on the battlefield.²⁰

Jomini identified, through his analysis of the relationship of cause and effect in a body of facts, a set of principles. These principles, whose practical effect is victory, are laws which will confer success: doctrines. Jomini, through the articulation principles, prescribes a formula for success. Deviation from these principles decreased the chances of victory, but Jomini also argued that the commander should not be inhibited from deviating from a principle if required to by specific circumstances:

The maxims of application which are derived from these principles...if they are found sometimes modified according to circumstances they can nevertheless serve in general as a compass to the chief of an army to guide him in his task....

Natural genius will doubtless know how, by happy inspirations, to apply principles as well as the best studied theory could do it; but a simple theory, disengaged from all pedantry, ascending to causes without giving absolute systems, based ...upon a few simple maxims, will often supply genius....²¹

The principles are carried to the battlefield as a tool, much like a compass is carried to the battlefield as a tool. The compass provides the most accurate means of direction yet circumstances may require deviation from the intended azimuth. Nevertheless, the compass guides us to the point of deviation and the wise traveler always returns to his compass bearing as quickly as possible. To carry the analogy further, some travelers---possessed of an innate genius for direction---do not require a compass. But these will be few and rare. Jomini, through his theory, intends to provide direction for the ordinary man and in doing so "supply genius."

Both Clausewitz and Jomini, despite their differences on the purpose of military theory, believed that its source was found in the study of history. Critical, objective analysis of history is the only means available to determine cause and effects, to establish a reliable system of beliefs based on the interrelationships of those causes and effects, and to separate the enduring principles from the accidental anomalies.

The use of history does not lock military theory into the past. History provides a touchstone for the present and a guide to the future. Theory that is not well grounded in the past will be incapable of envisioning a future. If the military theorist has done his history well, if his theory is based on a reliable system of beliefs, he can peer into the future and either forecast behavior, forecast the future range of possibilities, or recognize when change is on the horizon. Without the reliable system of beliefs established by a critical analysis of history military theory is not verifiable. Theory becomes an idea existing only in the imagination---a myth.

The disagreements between Clausewitz and Jomini regarding the purpose of theory should not blind us to the fact that both were right. A simplification of their argument, that Clausewitz wrote theory as a guide to thought and Jomini as a guide to action, defines the two essential elements of military doctrine. Doctrine must have both an intellectual and a practical component. The purpose of military

theory is to lay the foundation for doctrinal thought and action through a “rigorous system of training and education.”²² that establishes a common, reliable system of beliefs that guide the conduct of war.

This common system of beliefs ensures unity of action and thought in a military organization. Disciplining the intellect of the men who lead in war allows those men to “decide rightly” and, more importantly, allows them to teach commonality of action. The unity of thought combined with commonality of action is doctrine.

Doctrine is the practical application of theory and the purpose of doctrine--- common thought and action---demonstrates the practical utility of theory. In his introduction to Some Principles of Maritime Strategy Sir Julian Corbett summarizes the dynamic interplay between the purposes of theory and doctrine:

[Theory’s] main practical value is that it can assist a capable man to acquire a broad outlook whereby he may be surer his plan shall cover all ground and whereby he may with greater rapidity and certainty seize all the factors of a sudden situation.

Its practical utility, however, is not by any means confined to its effects upon the powers of a leader. It is not enough that a leader should have the ability to decide rightly; his subordinates must seize at once the full meaning of his decision and be able to express it with certainty in well adjusted action. For this every man concerned must have been trained to think in the same plane; the chief’s orders must awake in every brain the same process of thought; his words must have the same meaning for all. Nor is it only for the sake of mental solidarity between a chief and his subordinates that theory is indispensable. It is of still higher value for producing a similar solidarity between him and his superiors at the Council table at home.²³

Theory provides a reliable system of beliefs by which a commander can discipline and train his intellect in order to understand the nature and conduct of war. The reliability of those beliefs provides the foundation by which the commander can impart a blueprint for the conduct of war to his seniors and subordinates to ensure commonality of thought and action. The beliefs and the blueprint are articulated through doctrine. The cornerstone of both theory and doctrine is a reliable system of beliefs, without which neither theory nor doctrine is valid.

The Joint and Service perspectives of doctrine, with one exception, are consistent with this model. Joint Pub-1 Joint Warfare of the Armed Forces states that

Military doctrine presents fundamental principles that guide the employment of forces. Doctrine is authoritative but not directive. It provides the

distilled insights and wisdom gained from our collective experience with warfare....[J]oint doctrine deals with the fundamental issue of how best to employ the national power to achieve strategic ends.

Joint doctrine offers a common perspective from which to plan and operate, and fundamentally shapes the way we think about and train for war.²⁴

The U.S. Army defines doctrine as

[T]he statement of how America's Army...intends to conduct war and operations other than war. It is the condensed expression of the Army's fundamental approach to fighting, influencing events in operations other than war and deterring actions detrimental to national interests.

Doctrine seeks to meet the challenges facing the Army by providing the guidance to deal with the range of threats to which its elements may be exposed....It also incorporates the lessons of warfare and the wisdom of the Army's collective leadership in establishing a guide to action in war and operations other than war.

Doctrine is authoritative but requires judgment in application.²⁵

The U.S. Navy, in its recently published capstone doctrine, describes doctrine as:

[The] starting point from which we develop solutions and options to address the specific warfighting demands and challenges we face in conducting operations other than war. Doctrine is conceptual, a shared way of thinking that is not directive....With doctrine we gain standardization without relinquishing freedom of judgment and the commanders need to exercise initiative in battle.

Naval doctrine is the foundation upon which our tactics, techniques and procedures are built. It articulates operational concepts that govern the employment of naval forces at all levels. A product of more than 218 years of U.S. Navy...experience in warfighting, it incorporates the lessons of history, learned in both the flush of success and the bitterness of failure.²⁶

Air Force Manual 1-1 Volume I states that:

Aerospace doctrine is...what we hold true about aerospace power and the best way to do the job in the Air Force. It is based on our experience, our own and that of others....[D]octrine is a guide for the exercise of professional judgment rather than a set of rules to be followed blindly. It is the starting point for solving contemporary problems.

Doctrine is important because it provides the framework for understanding how to apply military power. It is what history has taught us works in war, as well as what does not.²⁷

General Gray, in the forward to FMFM-1 states that Marine Corps doctrine "provides the authoritative basis for how we fight and how we prepare to fight....[T]his book does not contain specific

techniques and procedures for conduct. Rather it provides broad guidance in the form of concepts and values. It requires judgment in application."²⁸ FMFM-1 goes on to state that

Doctrine establishes a particular way of thinking about war and a way of fighting, a philosophy for leading Marines in combat, a mandate for professionalism, and a common language. In short, it establishes the way we practice our profession. In this manner, doctrine provides for harmonious action and mutual understanding.²⁹

There are elements common to all of these passages. Each recognizes that doctrine provides a common basis for action and thought. Each recognizes the intellectual component of doctrine. Each recognizes that doctrine serves a practical purpose. All five emphasize that doctrine is authoritative but requires judgment in application. These common elements illustrate the dual purpose theory plays in the development of doctrine and in all five we see the influence of Clausewitz's focus on the nature of war and Jomini's focus on the practical means of waging war.

One element, the critical importance of history in the development of doctrine, is common to four of our examples but absent in one. The Navy, Army, Air Force and Joint Pub-1 all use historical vignettes to illustrate their doctrinal tenets. All four emphasize the role of historical analysis in their discussion of doctrine. FMFM-1 refuses to pay homage to history: it contains no historical vignettes, no reference to the Marine Corps experience in war, no recognition that history influenced any aspect of Marine Corps doctrine. FMFM-1 has severed history from Marine Corps doctrine. That amputation was necessary however, because there is no justification in history to support the Marine Corps version of maneuver warfare.

The lack of historical perspective in FMFM-1 is the starting point for discussing the manual's flaws. This analysis will focus on specific words and phrases in different parts of FMFM-1. In presenting their argument the authors of FMFM-1 have manufactured definitions, presented opinion as fact and made statements intended to be accepted as truth on the authors authority that---under scrutiny---appear at best superficial, at worst deliberate intellectual malfeasance. The cumulative effect of these points, woven throughout the manual, is the presentation of a doctrine that appears to be constructed of stout logic but is in reality a facade. It was this type of doctrine that led George C. Marshall to comment that he

was "so fed up on paper, impressive techniques and the dangerous effect of masses of theory which have not been leavened by frequent troop experience."³⁰ The breakdown in FMFM-1 begins in Chapter 2 in a section titled "Styles of Warfare."

FMFM-1 states that all warfare uses both fire and movement, "components that provide the foundation for two distinct styles of warfare: an attrition style, based on firepower, and a maneuver style based on movement."³¹ Attrition and maneuver are defined as absolute, distinct opposites. War is conducted using one of the two styles and FMFM-1 establishes an "either-or" argument. Either you fight an attrition style of war, or you do not. Either you are a maneuverist or you are not. The styles are distinct, you cannot be both. The definition of the attrition style of warfare further separates the two: "[w]arfare by attrition seeks victory through the cumulative destruction of the enemy's material assets by superior firepower and technology."³² Attrition is not a tool, it is the chosen vocation of the attritionist, whose less than compelling attributes are defined by FMFM-1.

An attritionist sees the enemy as targets to be engaged and destroyed systematically. Thus the focus is on efficiency, leading to a methodical almost scientific approach to war....The attritionist gauges progress in quantitative terms : battle damage assessments, "body counts," and terrain captured. He seeks battle under any and all conditions, pitting strength against strength to exact the greatest toll from his enemy. The desire for volume and accuracy of fire...leads toward centralized control, just as the emphasis on efficiency ...leads to an inward focus on procedures and techniques. Success through attrition demands the willingness and ability also to withstand attrition.... Victory does not depend so much on military competence as on sheer superiority of numbers in men and equipment.³³

The attritionist is an incompetent. The attritionist sacrifices lives to compensate for his lack of skill. An unimaginative buffoon, he is willing to go toe to toe with his opponent regardless of the cost. The attritionist is easy to recognize: he is methodical, captures terrain, asks for battle damage assessments, focuses on efficiency, has established procedures and techniques and likes centralized control.

The maneuverist, in contrast, is intelligent and enlightened. The maneuverist, fighting, warfare by maneuver attempts to:

circumvent a problem and attack it from a position of advantage rather than meet it straight on. The goal is the application of strength against selected enemy weakness. By definition, maneuver relies on speed and surprise, for without either we cannot concentrate strength against enemy weakness....The need for speed in turn requires decentralized control. While attrition operates

principally in the physical realm of war, the results of maneuver are both physical and moral. The object of maneuver is not so much to destroy physically as it is to shatter the enemy's cohesion, organization, command and psychological balance. Successful maneuver depends on the ability to identify and exploit enemy weakness, not simply on the expenditure of superior might. To win by maneuver, we cannot substitute numbers for skill. Maneuver thus makes a greater demand on military judgment.³⁴

The maneuverist possesses bold skill, daring and superior judgment. He is defined however, as much by what he does not do as by what he does. The maneuverist does not focus on procedures, seek body damage assessments, desire volume and accuracy of fire, systematically destroy the enemy, or rely on superiority of numbers in men and equipment. To do any of these things disqualifies him as a maneuverist. This choosing of sides is emphasized by the subtle use of "we" and "he" in the passages quoted above. "We" are maneuverists and you are either with us or against us. Commanders who display any of the qualities of the attritionist are banished to the ranks of the unlearned and incompetent.

The flaw in this argument is that FMFM-1 uses a definition of "attrition" convenient to its premise, a definition that deliberately separates attrition from maneuver. The Department of Defense definition, that attrition is "the reduction in effectiveness of a force caused by loss of personnel and material,"³⁵ is superseded by a definition that brands attrition as an undesirable form of warfare. The elevation of attrition and maneuver to the status of distinct "styles of warfare" as well as the definition and values assigned each style effectively removes attrition as a tool available to the Marine commander. This problem is exacerbated in the last paragraph of the section, a paragraph where FMFM-1 severs itself from history and thus any hope of establishing a reliable system of beliefs upon which to build its doctrine.

The paragraph reads:

Because we have long enjoyed vast numerical and technological superiority, the United States has traditionally waged war by attrition. However, Marine Corps doctrine today is based on warfare by maneuver....³⁶

The first sentence is presented as a given, a fact that the authors intend the reader to accept without question. Attrition warfare has already been described; now it is identified as the way in which the United States has traditionally conducted war. The second sentence separates Marine Corps doctrine from that tradition. American military history is a history of war waged by attritionists. That history

contains no lessons for Marine Corps doctrine. The first sentence has to be true to give the second sentence, and the balance of FMFM-1, any validity. Unfortunately, the first sentence is a smokescreen.

"Tradition" is defined by Webster's as "an inherited, established, or customary pattern of thought, action, or behavior; the handing down of information, beliefs, and customs by word of mouth or by example from one generation to another...."³⁷ A simple, cursory examination of the tradition handed down by our military forefathers is adequate to disprove FMFM-1's assertion: Washington during the War of American Independence, Winfield Scott on the road to Mexico City, Stonewall Jackson in the Valley, Robert E. Lee at Chancellorsville and Second Manassas, Grant at Vicksburg, Joseph Johnston and Sherman before Atlanta, Sherman's march across Georgia, Patton in Sicily, Normandy, and the Bulge, MacArthur and Nimitz during the Pacific Campaign, MacArthur at Inchon, are all examples of warfare by maneuver. None can be used in FMFM-1 however because the manual has already established the disgust with which it views attrition. A critical analysis of each of those examples reveals that Scott had his Chapultepec, Lee his Gettysburg, and Grant his Cold Harbor. It would have revealed that Sherman's march was possible because it was preceded by three years of attrition warfare, that MacArthur had his retreat to Pusan and that Clark failed at Anzio. A critical analysis of history would have revealed that attrition and maneuver are not distinct styles of warfare; both are methods that exist side by side. It is the synergistic combination of both, each emphasized according to purpose and circumstances, that comprises the art of warfare. A critical analysis of history would have negated the premise of FMFM-1. There existed no choice but to deny history. The result is a doctrine---from the Service that fought on Iwo Jima and Okinawa, fought its way out of Chosin, and battled the North Vietnamese in Hue City---that is founded on the premise that the enemy's cohesion can be shattered "through a series of rapid, violent, and unexpected actions"³⁸ and that once outmaneuvered remnants of the enemy can be destroyed with "relative ease."³⁹ To determine whether this doctrine is founded on a reliable system of beliefs with practical application on the battlefield we must analyze the origins of maneuver warfare.

The Origins of Maneuver Warfare

The origins of maneuver warfare are found in the stalemated slaughter of World War I, in the advent of mechanization and in the writings of J.F.C. Fuller and B.H. Liddell Hart; both of whom based their theories on their experiences with the first two elements. Both Fuller and Hart, searching for an alternative to stagnated trench warfare, believed that the speed, tempo, surprise, and terror inherent to mechanization could paralyze an opponent. Once paralyzed an enemy would lose his will to fight. Once an opponent's will is destroyed his armies will crumble. The destruction of an opponent's will to fight---through actions that paralyze and disrupt his armies---is the common theme of maneuver warfare and the foundation of both Hart and Fuller's theory. They differed dramatically on the ways in which that result could be achieved however, and from a common origin there developed two distinct family branches. To understand the origins of the myth we must analyze the differences between Liddell Hart and J.F.C. Fuller.

J.F.C. Fuller's theories, introduced into practice at Cambrai in November 1917, focused on the ability of the tank to paralyze an opponent's will through the synergistic effects of mobility, speed, surprise, demoralization and destruction. The attack at Cambrai, which surprised and initially demoralized the Germans, did not induce the paralysis of will Fuller had hoped for. The Germans recovered, counterattacked, and reestablished their lines, but the final result did not dampen Fuller's enthusiasm. He saw, in the initial gains, a vision of maneuver warfare that only required refinement of technique to reach fruition. In May of 1918 that refinement found expression in "Plan 1919."⁴⁰

In developing "Plan 1919" Fuller turned his attention from a purely frontal attack similar to Cambrai to a flanking attack launched from inside a salient on the western front. His consideration of the flanking attack resulted in a progression of thought that began slowly to define the purpose of his theory. Fuller explains:

I began to turn from the purely frontal attack to the possibilities of flanking operations and a little later on to a definite rear attack...in order to cut its [the Army's] garrisons off from their reserves. The next step was a simple though highly dramatic one---it was to cut an entire army or group of armies off from its command. The argument was a perfectly logical one, namely, as a Government depends for its power on the national will, so does an army depend on the will of its commander and his Staff: cut that will off and the army will be paralyzed.⁴¹

In "Plan 1919" Fuller's theory of begins to take concrete form and as his vision solidifies Fuller sees "[t]ens of thousands...being pulled back by their panic stricken headquarters....I saw the intimate connection between will and action, and that action without will loses all coordination: that without an active and directive brain, an army is reduced to a mob."⁴² He finds inspiration in antiquity, believing that if he can rationalize his theory a small tank army could replicate the feats of Alexander at Issus and Arbela. "What was the secret of these engagements?" he asks; simply that "whilst Alexander's phalanx held the enemy's battle body in a clinch, he and his Companion Cavalry struck at the enemy's will, concentrated as it was in the body of Darius. Once this will was paralyzed, the body became inarticulate."⁴³ The foundations of Fuller's theory are evident in these ruminations. An army is an organization and as such is dependent on its headquarters to direct action and provide purpose. To illustrate this point Fuller makes an army analogous to the human body; kill the brain and the body ceases to function. Armies, commanders and headquarters do not have to be incrementally destroyed. Demoralization can accomplish the same effect with more efficiency if an attack is focused on destroying the commander's will. The instruments of this attack are a fixing force to clinch and hold the enemy, and a force of decision to strike at the enemy's source of will. The result is "strategic paralysis" and a decisive victory won in a single battle.⁴⁴ "Plan 1919" is the vehicle by which this theory is to be put into practice:

The first of all strategical objectives is the 'the principle of the object,' the object being 'the destruction of the enemy's fighting strength.' This can be accomplished in several ways, the normal being the destruction of the enemies field armies---his fighting potential.

Now the potential fighting strength of a body of men lies in its organization; consequently, if we can destroy this organization, we shall destroy its fighting strength and so have gained our objective.

There are two ways of destroying an organization:

- (i) By wearing it down (dissipating it).
- (ii) By rendering it inoperative (unhinging it).

In war the first comprises the killing, wounding, capturing and disarming of the enemy's soldiers---body warfare. The second, the rendering inoperative of his power of command---brain warfare. Taking a single man as an example: the first method may be compared to a succession of slight wounds which will eventually cause him to bleed to death; the second---a shot through the brain....

As our present theory is to destroy 'personnel,' so should our new theory be to destroy 'command,' not after the enemy's personnel has been disorganized, but before it is attacked, so that it may be found in a state of complete disorganization when attacked. Here we have the highest application of the principle of surprise---surprise by novelty of action....⁴⁵

The instrument of this surprise was the tank, whose tactics must be based on "principles of movement and surprise, [the] tactical object being to accentuate surprise by movement, not so much by rapidity as by creating unexpected situations."⁴⁶ Fuller did not however, discount the necessity of "brute force." His purpose was always to destroy the enemy's army and he never deluded himself that this purpose would involve some measure of fighting. At the very least it would be necessary to employ a fixing force, a force that would have to rely on brute strength to clinch the enemy to ensure freedom of action for the maneuver force. Fuller sought efficiency and decisive victory and believed that both were possible if both brute strength and brain power were brought to the battlefield.

Germany collapsed in 1918 so "Plan 1919" was never tested in battle. Its tenets lived on, however, and became the foundation for Fuller's doctrine of "strategic paralysis." At the operational level the purpose of this doctrine was to attack the will of the enemy's commander and disorganize and demoralize his army. The decisive point---the enemy's rear---could only be attacked if a penetration was achieved and the enemy was immobilized by a fixing force. So, at the tactical level, the purpose remained physical destruction. The execution of this doctrine demanded commanders possessing a high degree of initiative as well as "quick intelligence, balance, and decisiveness, particularly the latter because the fog of war would remain just as dense in mechanized warfare."⁴⁷ Finally, Fuller believed that because mechanized armies are expensive as well as decisive, future war would consist of small professional armies fighting decisive battles for limited aims. This doctrine, born out of the horrors of World War I, possessed four flaws that did not to survive the realities of World War II.

Brian Holden Reid, in an article titled "J.F.C. Fuller's Theory of Mechanized Warfare," identifies and analyzes those four flaws. First, "Fuller placed far too much emphasis on reason."⁴⁸ in believing that a reduction in the size of armies and the decisive nature of mechanized warfare would cause reasonable men to limit the scope of war. He failed to grasp that nations which fight for their lives are not guided by reason and that units do not surrender because it is the sensible thing to do. The "bitter and bloody" fighting that prevailed from 1942 until the end of World War II refuted this aspect of Fuller's theory.⁴⁹

Second, the speed with which the defense reasserted itself on both the Eastern and Western fronts severely reduced the velocity of operations. Fuller recognized the dynamic interplay between the offense

and the defense, but the decisive nature of his theory held that speed, momentum, surprise and the resultant demoralization and disorganization would cause the collapse of an enemy before a coherent defense could be established. This did not happen. Given resolute commanders and disciplined forces the defense returned to dominate the battlefield and negated the effects of rapid mechanized warfare.⁵⁰

Third, Fuller did not anticipate the difficulties of fighting in urban terrain. When held by a determined enemy, "urban areas proved a deadly brake on the army's freedom of maneuver."⁵¹

Finally, Fuller's belief that small armies of equal strength would challenge each other to decisive battles of maneuver in open country proved to be an "unduly optimistic expectation."⁵² The practical reality of World War II was that decision in battle required an army to bring overwhelming strength to bear on a weak or broken enemy. In 1943, after the British resistance at Dunkirk and during the Battle for Britain, the recovery of the British Army during the Battle of Totensonntag in North Africa, the failure of the Germans to force the Soviet Union's surrender after Barbarossa, and the difficulties the Germans experienced reducing the Minsk-Bialystok pocket, Fuller reconsidered his position and "admitted that [my] belief that demoralization rather than destruction would become the aim of warfare was an overstatement."⁵³

These flaws reveal a trend that will haunt all the forefathers of maneuver warfare. On paper the theory appeals to a sense of reason and logic. Unfortunately, as FMFM-1 recognizes, war---by its very nature--- is not an activity governed by reason. Terrain, mission, policy and the enemy all conspire to impose constraints on maneuver. Opponents do not surrender because it is the reasonable thing to do. Velocity, surprise and momentum in battle can cause demoralization and disorganization, but only after the enemy has been reduced to a state conducive to disintegration. Sometimes, as in France in 1940, an army will be vulnerable to the effects of maneuver prior to hostilities because of some endemic fault of national character. More often, and more realistically, that vulnerable state is imposed through some manner of attrition that leads towards exhaustion. Then, weak and broken, the enemy becomes vulnerable to the coup de grace delivered through the effects of maneuver.

Despite these flaws and its inability to deliver the decisive victory it was designed to achieve Fuller's theory had practical application on the battlefield. Michael Howard has stated that in writing

doctrine it is impossible to be completely right; the key is to not be too wrong and to be able to recover quickly.⁵⁴ Fuller, with his focus on the enemy's rear as the decisive point, the combined effects of a fixing force and a maneuver force, the ability to cause disorganization and demoralization at the local tactical level, and the importance of initiative and presence on the part of commanders, developed a theory whose derived doctrine proved to be not too wrong. He was certainly less wrong than B.H. Liddell Hart, his rival and peer.

Captain Sir Basil Henry Liddell Hart, after surviving two wounds in World War I, developed a post-war reputation as a superb trainer of amateur soldiers and an expert in infantry tactics. Ill-health forced him to retire from active service in 1924. Hired as the military correspondent for *The Daily Telegraph* in 1925 Hart developed from his abhorrence of World War I strategies, his excellence in tactics, and the forum provided a popular journalist the "Strategy of The Indirect Approach."⁵⁵

The foundation of Hart's theory is that "[S]trategy...has for its purpose the reduction of fighting to the slenderest possible proportions."⁵⁶ Resistance, which increases the possibility of fighting, is reduced by attacking the source of that resistance:

[I]n war the chief incalculable is the human will, which manifests itself in resistance, which in turn lies in the province of tactics. Strategy has not to overcome resistance, except from nature. Its purpose is to diminish the possibility of resistance, and it seeks to fulfill this purpose by exploiting the elements of movement and surprise.⁵⁷

An analysis of this passage reveals the foundation of Hart's theory. Resistance results in tactical combat. If the will to resist is destroyed then combat is not necessary to victory. The purpose of strategy is not to overcome the enemy through battle. The purpose of strategy is to destroy the will to resist before battle is joined through the cumulative effects of movement and surprise. The strategists

[T]rue aim is not so much to seek battle as to seek a strategic situation so advantageous that if it does not of itself produce the decision, its continuation by battle is sure to achieve this. In other words, dislocation is the aim of strategy; its sequel may be either the enemies dissolution or his easier disruption in battle. Dissolution may involve some partial measure of fighting, but this has not the character of a battle.⁵⁸

Strategy, then, results in a nearly bloodless victory achieved through the merits of position instead of force. Whatever fighting may be necessary is more a tidy mopping up than a battle. The dislocation of the opponents will remove resistance from the warfare equation and, in doing so, remove combat from the battlefield.

Dislocation has both a physical and psychological component. Physical dislocation is produced not through combat but by positioning forces in such a manner as to "upset the enemy's disposition...separate his forces, endanger his support, [or] menace his route of retreat."⁵⁹ This effect, achieved by strategic maneuver through enemy weak points, presents an opponent with a fait accompli. Battle is neither necessary nor desired as the search for and exploitation of weak points in the enemy's defenses negates the requirement for battle during these maneuvers. The proper positioning of forces astride routes of supply, retreat, or reinforcement results in the psychological dislocation of the opponent. He is trapped. The resistance manifest in his will dissolves to be replaced by the incoherent fear of the trapped animal. Presented with no options an opponent surrenders. His forces, bereft of the unifying element of a commander's will, present little or no resistance. This combination of the physical and the psychological elevates war above the horrors of slaughter, mud and bloodshed. Warfare assumes the sterile character of a chess match wherein an opponent, once checkmated, gives up his game.⁶⁰

Liddell Hart, attempting to validate his theory using historical example, exposed himself to criticism by his selective use of history to prove what he believed to be an absolute truth. Brian Bond, in his book Liddell Hart: a Study of His Military Thought noted that Hart's method was largely "self-fulfilling,"⁶¹ a methodology that sacrificed intellectual discipline in favor of proving a preconceived conclusion. Bond continues:

[Hart's] method was unscientific in other respects: whole centuries, areas of the world and significant wars are omitted; and one would expect more cases of the indirect approaches failing...or direct approaches succeeding....Perhaps most serious of all, Liddell Hart [treated] warfare and generalship almost entirely in isolation from their political, social, and economic contexts.⁶²

Hart's contemporaries, focusing on Hart's selective use of history and refusal to recognize the practical contexts of warfare, echoed these criticisms. Their arguments centered not on the possibility that

the indirect approach would work---given the proper circumstances and enemy all recognized its value--- but on Hart's insistence that it would always work. Spencer Wilkinson, reviewing one of Hart's articles stated that Hart "was propounding a paradox: he was after the old will o' wisp, victory without battles or blood shed."⁶³ General Sir W.H. Bartholomew cautioned Hart to be aware of the dangers of attempting to prove a theory by exemplification as "one is apt to forget to put the other side,"⁶⁴ and criticizes Hart for "glorifying the method" at the expense of the purpose.⁶⁵ T.E. Lawrence, in a letter to Hart, captures neatly the dangers of proclaiming to have discovered an absolute truth:

You established your thesis; but I fear that you could equally have established the contrary thesis, had the last war been a manoeuvre war and not a battle war. These pendulums swing back and forward. If they rested still that would be absolute truth: but actually when a pendulum stands still it's that the clock has stopped, not that it has achieved absolute time.⁶⁶

Fuller's criticism of Hart highlights the fundamental differences between the two theorists. Both men argued warfare should focus on paralysis vice physical destruction of the enemy. Fuller, however, believed that armies should seek battle to accomplish this while Hart believed that armies should avoid battle by maneuvering. Fuller's belief, that paralysis was achieved through a combination of physical combat and psychological dislocation was diametrically opposed to Hart's insistence that battle was unnecessary; victory was found in the psychological realm.

The debate revolved around two points: the need for a fixing attacks at the tactical level and Hart's insistence that the indirect approach was inviolate. In arguing the former point Hart insisted that deep strategical penetration funneled through an enemy "soft" spot would accomplish in one operation, devoid of battle, a decisive victory. Hart criticized Fuller's insistence on the necessity of the fixing attack claiming that it illustrated a fixation on the tactical level of war. Fuller countered that Hart's argument, which rests on the assumption that the penetration could be effected without battle, was absurd. His comment that "Liddell Hart looks upon fixing as a purely tactical operation---it is really a strategical one"⁶⁷ illustrates Fuller's belief that at the operational level of war the tactical means of the direct approach supports an operational indirect approach. Concerning the latter argument Fuller, commenting on Hart's intransigence regarding the indirect approach, commented that:

It is wrong to look upon the indirect approach as a cure-all. The object is to defeat the enemy and if this can be done by the direct approach so much the better. The indirect approach is a necessary evil. Which should be followed depends entirely on weapon-power. If I met a ruffian and I am armed with a pistol and he is not, my approach is direct; should however both of us be armed with knives my approach will probably be indirect.⁶⁸

Fuller is arguing against the limitations imposed by a rigid adherence to a method at the expense of options. In a succinct comment, worthy of study by any Marine officer pondering the utility of FMFM-1, Fuller continues his criticism of Hart's insistence on focusing on ways to the detriment of purpose:

In war a general should aim at a decisive spot, if this spot is also a soft spot so much the better, but if it is only a soft spot he is not a great general.⁶⁹

Liddell Hart never intended to contribute to the historical study of warfare. His purpose was to shock into change a system of military thought and practice that had grown stagnate and stupefied. It was an emotional effort, but emotion always overstates its case and Hart indulged in some dramatic historical license to illustrate his points. When theory is based on historical example corrupted by selectivity and emotion, objective analysis of historical and practical reality is replaced by false illusions. Doctrine, forsaken by a reliable system of beliefs, is seduced by a theoretical mirage holding promises of possibilities constructed out of air and false reflections. Liddell Hart---in his belief that battle is not necessary to victory, that once outmaneuvered a commander's will to resist will collapse, that what remains of his force can then be easily dissolved, and his insistence on developing a theory unencumbered by constraints---propagates a dangerous illusion.

But this danger is mitigated if those who write doctrine recognize the theoretical flaws inherent to writings whose first purpose is to effect dramatic organizational change. Organizational inertia resists arguments based on reasoned and objective analysis. The first step to change is to shock the system by dramatic and emotional attacks that shake its foundations. But this initial shock, which inspires argument and thought, must eventually give way to a reasoned and objective analysis of both the old order and the new vision that cultivates a framework within which the organization can operate given practical and realistic constraints. An organization that adopts without question the arguments advanced in the first step will continuously chase mirages. Regardless of how well one describes the mirage, and regardless of how

many people can be convinced it exists, the fact remains that it is not there. The U.S. Marine Corps, in FMFM-1, did not recognize the danger and has adopted without question Liddell Hart's version of maneuver warfare. The illusions propagated by the father live on in the prodigy.

Then, in the dramatic events of 1940, Liddell Hart's illusion appeared to become real. Heinz Guderian, in an operation with few parallels in modern war, put the indirect approach into practice in his dash across France in 1940. Guderian, the leading proponent of what Matthew Cooper calls the "armored idea," believed that deep, unsupported thrusts by mechanized forces would disrupt and paralyze an enemy. The achilles heel of the "armored idea"---its long exposed flank---would be protected by the speed and tempo of the attacking force, by the inability of an enemy to fix the attacker and by the resulting psychological disruption and paralysis. Decisive victory is achieved in one unrestrained advance deep into the enemy rear. German infantry, following at leisure, would mop up whatever limited resistance remained.⁷⁰

In one small brilliant snapshot of the war Guderian's idea almost worked. That snapshot, from the Meuse to the outskirts of Dunkirk, evaluated in isolation of political, social, economic and military factors, becomes justification for Hart's theory: to think and fight like Guderian will achieve the results Guderian achieved in France in 1940. Thus the practical application of the indirect approach is proven.

The fact that it worked but once is ignored. The fact that Guderian's attack was supported by attacks of attrition to his North and South is ignored. The moral, social, and military bankruptcy of France that made that nation susceptible to the effects of the indirect approach is not considered. The steadfast, heroic resistance of the outmaneuvered British surrounded at Dunkirk and the futile heroics of the French army acting as rearguard for the British evacuation---forces which in theory should have surrendered or offered minimal resistance---is ignored. Hitler's decision to halt the Panzers is dismissed as lunacy. Given free rein, according to the argument, Guderian would have destroyed the Allied enclave. To consider his logistics difficulties, the very real threat to his flanks posed by a theoretically paralyzed enemy, and the fact that political considerations constrain maneuver in any war would destroy the myth. Better to concentrate on that portion of the French campaign that supports the illusion. From this tenuous link

between theory and practice, from what Guderian proved is sometimes possible, has emerged the dogma and myth of maneuver warfare as defined by William Lind and FMFM-1.

William S. Lind published the Maneuver Warfare Handbook in 1985 with the expressed purpose of explaining the nuances of maneuver warfare theory to U.S. Marines in a manner which makes the theory easily understandable. By 1985 "maneuver warfare" was the subject of much discussion in the Marine Corps. Major General A.M. Gray (later Commandant of the Marine Corps) had adopted maneuver warfare as doctrine in the 2d Marine Division. The Marine Corps Gazette regularly published articles on the subject (most authored by Lind) and a number of Marine Corps units discussed maneuver warfare during officer symposiums. Despite this focus the theory of maneuver warfare still generated a great deal of confusion. The purpose of the handbook, in Lind's words, "is to clear up the confusion."⁷¹

One gets the sense in reading the foreword and introduction that the authors do not expect their work to be well received by the Marine Corps hierarchy. Lind, and those of like mind, are engaged in a "crusade to sell 'maneuver warfare',"⁷² and there is not much hope that the Marine Corps is buying. The author and his collaborators, painfully aware of the inertia in the tradition-bound Marine Corps, are determined to shock the Marine Corps into changing the way it thinks about warfighting.

Lind and his fellow "maneuverists," with their emphasis on speed of thought and action, started the engine of change and had a profound effect on the Marine Corps warfighting philosophy. But they carried their point too far. That emphasis, and the change it wrought, should have been left to stand alone as the intellectual component of Marine Corps doctrine. Unfortunately Lind allows himself to become seduced by Liddell Hart's illusion and commits himself to an argument composed of two basic and fatal flaws: first, he promises results that exist only in myth and second, he argues his points as absolute truth.

Lind's underlying assumption---that the U.S. military has traditionally relied on attrition warfare to achieve victory---although contrary to history and fact is essential to his thesis for a number of reasons. First, it separates attrition from maneuver creating a false dichotomy which elevates both to styles of warfare and identifies the former as the undesirable form. Second, it subtly links intellectual innovation with Lind's form of maneuver warfare while linking attrition with conservatism. Third, it dismisses the

weight of history from the argument allowing the author to proceed secure in the knowledge that the reader will regard the statement as fact.⁷³

After initially describing maneuver warfare as “military judo”⁷⁴ Lind defines the essence of maneuver warfare theory in terms of the “Boyd Theory.” John Boyd, an Air force fighter pilot, developed from a study of air to air combat during the Korean War the “Boyd Cycle.” Noting that American aviators achieved a 10:1 kill ratio over North Korean and Chinese pilots flying in a superior aircraft, Boyd determined that the F-86, although unable to turn, climb, and accelerate faster than the MIG-15, possessed better cockpit visibility and could transition from one action to another more quickly than the MIG. American aviators, capitalizing on their visibility advantage, would force the MIG into a series of actions. Each time the action changed the Americans gained a time advantage and because the Americans could see better they were able to shift more rapidly to the next action. The MIG pilot, frustrated by his inability to outmaneuver an inferior aircraft and at an increasing disadvantage after each maneuver would panic. Paralyzed into inaction the MIG either fled or was shot down.

Having established a theory of air to air combat, Boyd studied land warfare to determine if a similar interrelationship existed. In battles and campaigns such as Vicksburg and France in 1940 he found similarities: one side, the often outnumbered victor, was able to present his opponent with a series of rapid and unexpected situations which the opponent could not respond to in a timely manner. The enemy, paralyzed and panicked, was defeated. From these observations Boyd developed the “Boyd Cycle”, often referred to as the “OODA Loop” in recognition of its tenets: observe your surroundings and the enemy; based on what you observe orient yourself to the situation; once oriented make a decision and act; as soon as you act the cycle starts again. The individual who is capable of cycling through the OODA Loop the fastest will win.⁷⁵

Thus, as incongruent as it may seem, a theory developed from air to air combat between individuals defines the theory of ground maneuver warfare. As Lind states:

The Boyd Theory defines what is meant by the word ‘maneuver’ in the term ‘maneuver warfare.’ Maneuver means Boyd Cycling the enemy, being consistently faster through however many OODA Loops it takes until the enemy loses his cohesion---until he can no longer fight as an effective force.⁷⁶

In the promised results of effective Boyd Cycling we hear the echo of Hart's illusion: "sometimes a Boyd Cycled enemy panics or become passive" or, now outmaneuvered, the "enemy may continue to fight as individuals or small unitsBut because he can no longer act effectively...he is comparatively easy to destroy."⁷⁷ For good Boyd Cyclers victory is inevitable and cheap.

Despite Boyd's study of selected land campaigns the sterile individual combat between machines maneuvering in the unrestricted environs of space does not translate well to the practical realities of land warfare. In certain situations—such as meeting engagements—Boyd's tenets may have some validity, but the tenets do not have universal applicability and in most situations the theory collapses. There is considerable difference between maneuvering a fighter and maneuvering an army. A ground commander, regardless of his OODA looping skill, must still contend with the fog and friction inherent to translating observation to orientation to decisive action. In the defense a commander may have to cycle through observe and orient many times before deciding when or if to act. Policy constraints or the nature of the conflict may impose drastic limitations on the actions available. The "Boyd Theory"—ignoring the moral dimension of war—fails to recognize that armies, unlike airplanes, are not dependent on the desires of a single individual and may retain a significant amount of cohesion and fighting spirit despite being outmaneuvered. Finally, an enemy may be content to watch you "Boyd Cycle " at the speed of light secure in the knowledge that he is on Iwo Jima, you need Iwo Jima, and eventually you are going to have to come ashore and root him out cave by cave. That is attrition. But attrition, in the peculiar logic of Lind's maneuver warfare, is not necessary.

It is time now to test that logic: to ask whether this theory is based upon a reliable set of beliefs. The test contains two questions: (1) if you turn inside the enemy's OODA Loop will he always panic or become passive? and (2) if you outmaneuver the enemy will he always be comparatively easy to destroy? Lind, whose theory is founded on a "yes" to both questions, does qualify his statements with "sometimes" and "may." But it is apparent from both his choice of words and lack of an alternative option if the "sometimes" occurs that Lind believes the chances of his theory failing are infinitesimal. The answer to both questions is an unequivocal "no," and if the answer is "no" then the theory has only limited and specific practical application. Any doctrine derived from that theory is a prisoner to those limitations. To

elevate such a theory to absolute truth with universal application is to base doctrine on myth. The belief that rapid thought and action combined with superiority of position will paralyze an enemy into easy submission is an illusion. In his refusal to recognize the practical realities of warfare Lind, whose theory claims to encourage intellectual innovation, has constructed instead a narrow and dogmatic intellectual straightjacket.

FMFM-1 wears that straightjacket well and it is a short step from the theories of William Lind to Marine Corps doctrine. In FMFM-1 the concept of maneuver is defined as movement in space to gain a positional advantage and movement in time to "generate a faster operational tempo than the enemy to gain a temporal advantage."⁷⁸ Maneuver warfare is defined as "a warfighting philosophy that seeks to shatter the enemy's cohesion through a series of rapid, violent, and unexpected actions which create a turbulent and rapidly deteriorating situation with which he cannot cope."⁷⁹ The purpose of maneuver warfare is to make an enemy incapable of resistance by destroying his moral and physical cohesion. All actions in maneuver warfare are directed towards this purpose. Firepower, which provides the "violent" action, has as its first purpose not destruction but "moral dislocation" and as its second purpose suppression; firepower is used for destruction if "the opportunity presents itself" and then only if it is convenient.⁸⁰ Cohesion is shattered by application of the Boyd Cycle: by posing "menacing dilemmas in which events happen unexpectedly and faster than the enemy can keep up with them"⁸¹ we cause our opponent to become panicked and paralyzed. He loses his will to resist. The promised result of all this is familiar:

[T]he components of his physical strength that remain are irrelevant because we have paralyzed his ability to use them effectively. Even if an outmaneuvered enemy continues to fight as individuals or small units, we can destroy the remnants with relative ease....⁸²

All the weaknesses of the theory are translated to the doctrine. The criticisms levied against Liddell Hart and William Lind apply as well to FMFM-1. There exists no reliable cause and effect---no reliable system of beliefs---in the theory that can justify the doctrine. The linkage between theory and doctrine is broken. What remains is a belief, commonly held to be true, which has no factual basis. Even when history is introduced by Lind and Hart it is sanitized to justify a preconceived conclusion. The

doctrine, like the theory, becomes an illusion based on myth. The result is a doctrine whose practical application is restricted to those rare occasions when the practical realities of warfare all conspire to allow the doctrine to work as advertised. The reality is that those practical requirements will more often conspire to make the doctrine irrelevant. The doctrine of the U.S. Marine Corps needs to accommodate both circumstances. FMFM-1 is inadequate to that task. The theoretical construct upon which it is built must change.

A Theoretical Construct for U.S. Marine Corps Doctrine

This paper has identified three fundamental flaws in FMFM-1: first, its theoretical foundation is constructed of a mythical illusion; second, it focuses on method to the exclusion of purpose and third, it attempts to provide an intellectual component of doctrine that cannot be put into practice. Those flaws severely restrict the practical application of the doctrine derived from FMFM-1. This chapter recommends a theoretical construct to correct those flaws.

Purpose must provide the unifying focus for military theory and doctrine. Political policy, which provides that purpose, also determines the ways and means available to the military to accomplish its tasks. Policy determines where and for what purpose military force will be brought to bear. Policy determines who that force will be brought to bear against. Policy will also place limits on how that force may be employed. The essence of the operational art is to relate military purpose to political purpose. The definition of that art as the “the employment of military forces to attain strategic goals through the design, organization, integration, and execution of battles and engagements into campaigns and major operations”⁸³ captures that essence and should serve as the unifying focus for doctrine. Using that definition as a guide the link between tactics, operations, and strategy remains secure but the problem of doctrine becomes intensified. Given policy constraints and restraints, the large spectrum of potential missions, and the requirements imposed by the enemy and the terrain, doctrine must be capable of accommodating a wide range of possibilities. Required to plan and execute in the realm of the possible the operational artist cannot be denied any tool, to include the tool of attrition. Attrition is indispensable to maneuver and it is the combination of both—each to its purpose and each to its place—by which the operational artist links tactics to operations to policy. Hans Delbrueck and James Schneider provide a theoretical construct for a doctrine combining attrition and maneuver. In those theories lies a theoretical foundation for U.S. Marine Corps doctrine.

Hans Delbrueck authored History of the Art of War Within the Framework of Political History, a work of monumental scholarship encompassing a study of warfare from the ancient Persians through World War I. Gordon Craig refers to Delbrueck as a “the destroyer of myths”⁸⁴ in recognition of his

effort, through a painstaking analysis of military history, to determine the basic and essential elements of military strategy. Delbrueck's purpose, in his words, is to "bring out clearly...the relationship between the organization of the nation, tactics, and strategy."⁸⁵ Delbrueck's constant theme is that the conduct of warfare and strategy must be determined by the aims of policy. If military thinking becomes inflexible and self-serving the exercise of military force to achieve political goals will lead to political disaster regardless of the brilliance of any tactical successes.⁸⁶

Delbrueck's historical methodology encompassed a critical and detailed reconstruction of battles and campaigns in a search for continuity in military history. During his study three themes emerged as constants in warfare: the evolution of tactical forms throughout history, the continuous relationship between politics and war, and the division of all strategy into two forms. The latter theme, Delbrueck's "Strategy of Annihilation" and "Strategy of Exhaustion," provides our focus.⁸⁷

In a strategy of annihilation the sole aim of military force is the destruction of the enemy's armies in battle. The commander devotes his entire energy to securing an advantage that will make his victory as great as possible. He need not be concerned with the political ramifications of the battle since annihilation of the enemy is the means to the end: battle is the sole means of executing policy. Delbrueck refers to this as the "one pole strategy." The single pole is battle: the sole purpose of the strategy.

In a strategy of exhaustion battle is only one several equally effective ways of attaining the political ends of the war. A commander employs a strategy of exhaustion when he has limited objectives or limited resources. He focuses not on destroying his opponent but "on wearing him out and exhausting him by blows and destruction of all kinds to the extent that in the end he prefers to accept the conditions of the victor..."⁸⁸ The decision to employ a strategy of exhaustion is imposed by policy but, given limited resources or limited aims, the commander decides which of several ways of conducting the war will best suit the political aim. He decides when to fight and when to maneuver, when to dare all on a single blow and when to employ economy of force. Delbrueck states that the commander's decision:

is...a subjective one, the more so because at no time are all circumstances and conditions, especially what is going on in the enemy camp, known completely and authoritatively. After a careful consideration of all circumstances---the aim of the war, the combat forces, the political repercussions, the individuality of the enemy commander, and of the government and people of the enemy, as well as his own---the general must decide whether a battle is advisable or not. He can

reach the conclusion that any greater actions must be avoided at all cost; he can also determine to seek battle on every occasion....⁸⁹

In a strategy of exhaustion the practical realities of war, conditioned by the political aim, determine whether attrition---the physical destruction of personnel and equipment---or maneuver is employed. The pendulum swings back and forth between both within each battle, operation or campaign according to purpose and the circumstance. Delbrueck emphasized the critical importance of understanding the dynamic interplay between attrition and maneuver when he cautions the reader against becoming seduced by the "a pure maneuver strategy that allows war to be conducted without bloodshed:"

Such a pure maneuver strategy...is only a dialectical game and not any event in world history. Even if one side should actually present such a method of waging war, it still does not know whether the other side is thinking the same way and will continue with such ideas. The possibility of battle will always remain in the background...so the strategy of exhaustion is not at all to be equated with a pure strategy of maneuver; rather it is to be regarded as a type of warfare that is hostage to an internal contradiction...⁹⁰

The contradiction exists in the requirement for a commander to combine into a campaign of exhaustion the two extremes of attrition and maneuver, each to its purpose and each in its place, to achieve political objectives. It is this dichotomy that separates the two strategies. In a strategy of annihilation battle is the one means which outweighs all others. Maneuver serves attrition as a method of securing a position of advantage from which an opposing force can be destroyed. In a strategy of exhaustion battle is merely one of many equally effective means of achieving victory. Attrition normally serves maneuver---by fixing an enemy or conducting a penetration for example---but each may also be an end unto itself. The method used depends entirely upon the purpose of a battle or campaign and upon the practical realities imposed upon a particular theater of operations.

Delbrueck's theoretical construct, based upon an exhaustive study of the practical realities of warfare, provides a means of focusing the wide range of possibilities which doctrine must address. But the foundation is not complete until we establish a means of articulating a framework for combining the synergistic effects of maneuver and attrition into the conduct of tactics and operations. That foundation is provided by Dr. James Schneider.

Schneider articulates this element of his theory in Theoretical Paper No. 3: The Theory of Operational Art. Two armies, each determined to impose its will upon the other and each constrained by the practical realities of warfare, contend with each other to achieve their political objectives. This contact creates a "dynamic relationship called attack and defense."⁹¹ Schneider argues that there are two basic forms of attack and defense: destruction and maneuver. The purpose of destruction and maneuver in the attack is to "overwhelm the defender and shatter his cohesion."⁹² The purpose of maneuver and destruction in the defense is to exhaust the enemy and cushion his blow. A commanders will translated into action as the opposing forms of attack and defense struggle for supremacy creates the dynamic relationship between the attack and the defense.⁹³

Destruction and maneuver each contain two subforms applicable to the attack and the defense. In the attack the two subforms of destruction are the fixing and penetrating forms. The two subforms of destruction in the defense are the disengaging and the denying forms. The collision of these forms creates a dynamic relationship: when the attacker seeks to pin, a defender seeks to disengage; when an attacker seeks to penetrate a defender seeks to deny penetration. This dynamic relationship leads to attrition--- the physical destruction of personnel and equipment---and a battle, operation or campaign consisting solely of these forms in contest will tend towards attrition. Schneider assigns no value to this element of his theory other to state that attrition is seldom decisive in itself. It is the combination of attrition with maneuver that leads to decision.⁹⁴

In the attack the two subforms of maneuver are the enveloping and the exploiting form. In the defense the two subforms of maneuver are the counterenveloping and the restraining forms. Again, the collision of these forms creates a dynamic relationship: when an attacker attempts to envelop the defender attempts to counterenvelop; when the attacker seeks to exploit the defender seeks to restrain.⁹⁵

In Schneider's theory maneuver also carries a connotation that transcends the destruction and maneuver forms of the attack and the defense. Maneuver, defined in its purest form as "action," includes all actions taken to move or position forces in both the attack and the defense. Maneuver has two orientations---direct or indirect---each orientation possessing advantages and disadvantages. The orientation used depends upon consideration of all the variables of war. The decision on which orientation

should be used comprises what Schneider terms "the first creative act in operational art:" whether, in the attack, to attack an opponents center of gravity directly or indirectly and, in the defense, whether to defend your center of gravity directly or indirectly.⁹⁶

The decision cannot be made in a vacuum. The political objective, terrain, mission, and the character of the enemy—all of the factors mentioned by Delbrueck above— Influence the decision. Yet once made the operational artist must design, organize, integrate and execute battles and engagements in concert with that decision and in an environment where all action is accomplished relative to an opposing force. The dynamic relationship between the attack and defense drives design, organization and execution as each commander attempts actions that will place him at an advantage over his opponent attempting, in effect, to thwart his opponents will. By reducing or eliminating an opponents ability to maneuver relative to your force you deprive him of his freedom of action. More importantly, you retain the freedom of action necessary to impose your will upon the enemy.

Decisive advantage and freedom of action is not achieved by mirroring the subforms of destruction and maneuver. An attacker seeking only to penetrate can be defeated by a defender capable of denial. The result will be mutual exhaustion and destruction. An attacker seeking only to envelop can be effectively frustrated by a defender capable of counterenvelopment. The result is maneuver without decision. Practical application of the operational art involves combining the forms to achieve a common aim. For example: an attacker attempting to envelop reduces an opponents ability to counterenvelop through a supporting attack designed to fix. The opponent, seeking to counterenvelop, must first disengage. His ability to maneuver relative to the attacker is diminished if not eliminated. Freedom of action and relative advantage is achieved.⁹⁷

When this combination of forms is extended to combinations between maneuver units the options and diversity available to a commander increases exponentially. Forms can be combined between fireteams in squads, squads in platoons, platoons in companies in a continuous linkage extending to combinations between divisions of a Marine Expeditionary force (MEF) and between MEFs and other Joint Forces. It is those options and that linkage that gives coherence to Delbrueck. Policy, in all of its many and varied forms, determines the military aim. A commander, with many and varied tools at his

disposal, can determine which ways best corresponds to the means available, the military aim, and the circumstances of terrain and enemy. A doctrine that teaches the execution of the forms and subforms of attack and defense, that teaches leaders to execute combinations according to circumstances and purpose and to link purpose to a higher purpose, is a doctrine with practical application in modern warfare. Such a doctrine will make tremendous demands on the intellect, initiative, moral and physical courage, and experience of leaders required to execute combinations of attrition and maneuver---each to its place and each to its purpose---in order to design, organize, integrate and execute battles and engagements into campaigns and major operations that attain strategic objectives. The result is a doctrine unencumbered by the illusions of myth, considerate of the practical realities of warfare, and driven by purpose instead of by method.

Conclusion

FMFM-1 Warfighting needs to be rewritten. The flaws identified in this paper could possibly be corrected with a strong edit that retains all of the strengths of the current doctrine, but FMFM-1 has passed into the pit of dogma. Numerous examples exist that reinforce the dangers of continuing to rely on a doctrine based on a cult of maneuver warfare.

For decades the U.S. Marine Corps has “tended to focus on the tactical aspects of war to the neglect of the operational aspects.”⁹⁸ After the Persian Gulf War the Marine Corps began to rethink that focus. The foundation of this new thinking is articulated in the draft version of FMFM 2-1 Fighting the MEF. FMFM 2-1 is built around three themes: the MEF will usually fight as part of a joint team, the MEF will conduct top-down planning using a functional approach to planning that reinforces the primacy of the MEF in the planning and execution of operations, and the MEF will fight “one battle” (“single battle”) extending from its rear to the enemy’s rear. These doctrinal concepts, built from a detailed analysis of the requirements of modern and future warfare, violate the dogma of the Marine Corps capstone doctrine. Top down planning, a functional approach to planning, and the comprehensive view of the battlefield inherent to “single battle” are all qualities of an “attritionist.” Whether these concepts are necessary and regardless of their utility, the maneuverist must dismiss them since they violate the very foundation of maneuver warfare. The authors of FMFM 2-1 subtly recognize this obstacle to progress in Chapter 1:

Marine combat commanders must fully explore the potential of high technology and marry it to the traditional strengths of our Corps. Like the Marines who led the way to amphibious operations and maneuver warfare, we must move another step forward.⁹⁹

The step forward is into the realm of operational art---the ability to design, organize, integrate and execute operations and campaigns---but the way forward is blocked by the strict dogma of FMFM-1. The result, if the dogma is not destroyed, is a Marine Corps perpetually relegated to the tactical level of warfare.

William Lind provides a second example of the cultist in action. In a slanderous article titled “What Great Victory? What Revolution?” Lind, whose only source was his own bias and what he refers to as “unofficial information,” claims the Marine Corps in the Persian Gulf War “had in effect the 1st ‘German’ Division and the 2d ‘French’ Division.”¹⁰⁰ Lind bases this assessment---that the 2d Division

fought a methodical battle similar to the French doctrine of the 1930's---on the Division's use of centralized planning, tactical control measures, and on the fact that the Division halted when it reached certain phase lines. Lind does not consider the practical realities of warfare within whose framework the Division commander made decisions. This author conducted a detailed analysis of the 2d Marine Division in the Persian Gulf War and found a unit whose commanders exercised foresight, initiative, prudent tactics, and halted operations due to requirements imposed by a higher headquarters responding to the vagaries of war. But Lind is not interested in an objective analysis of the conflict. His purpose is to perpetuate the dogma of maneuver warfare and if that requires slander, loose use of facts, "unofficial" sources, and ignorance of the practical requirements of that war then those elements will be used: the truth cannot be allowed to interfere with the myth. Lind does acknowledge, in a final comment that should elicit disgust from Marines who take pride in the accomplishments of their forefathers from Tripoli to Vietnam, that the "Corps now has Reichswehr-quality troops and NCO's."¹⁰¹

John Schmitt, the primary author of FMFM-1 provides a final example of the influence of the cult of maneuver warfare. In an article published by the Marine Corps Gazette, in rebuttal to an article written by Kenneth McKenzie discussing the use of synchronization, Schmitt again confuses process with purpose. McKenzie's article focuses on the purpose of synchronization: the concentration of combat power at the decisive time and place. This purpose is integrated into a functional approach to planning and the primacy of the MEF in planning and executing operations. Schmitt's response misses those points. Exhibiting a lack of appreciation for the purpose of synchronization and a lack of an understanding of the practical realities of warfare that drive the requirement for top down planning, Schmitt argues that synchronization leads to rigid and methodical thought: a clear violation of maneuver warfare. Schmitt also argues that "a move toward the primacy of the MAGTF command element"¹⁰²---the central theme of FMFM 2-1---is an unequivocal violation of the tenets of FMFM-1. In an interesting soliloquy at the conclusion of his article Schmitt launches into a maneuverists litany, chanting a catechism of six questions beginning "Do you believe?" leaving no doubt that the proper cultist answer is "yes! I believe!" Schmitt brings his preaching home with the statement that "you can support maneuver warfare. You can support synchronization. You cannot do both."¹⁰³ If those are the terms of the debate then the only

responsible answer is that we do not believe. We do not support FMFM-1's version of maneuver warfare. There is obviously no room for compromise in the debate. FMFM-1 must be destroyed as dogma so that it can be resurrected as doctrine, a doctrine that should consider the following recommendations.

The Marine Corps must rid its doctrine of the term "maneuver warfare." As defined by FMFM-1 maneuver warfare is a doctrine founded on myth. In the entire history of warfare there is no credence to the illusion that an enemy's cohesion can always be shattered by rapid thought and action and that once shattered his remnants will always be defeated with relative ease. Those opportunities do present themselves but their occurrence is rare and determined not by the illusion of method perpetuated by Hart, Lind, and FMFM-1 but by a confluence of circumstances that can be exploited but cannot be created. The practical reality is that sometimes you get to fight the French in 1940 and sometimes you fight the Japanese in the Pacific. Your doctrine needs to be able to do both. Unquestioning adherence to the dogma of "maneuver warfare"—currently preached as absolute truth in the Marine Corps—is irresponsible, impractical, and prevents the Marine Corps from developing a coherent doctrine with practical application across the spectrum of conflict

Like all myth, the maneuver warfare defined by FMFM-1 is based on false logic. The U.S. Military does not have a tradition of "attrition warfare." To claim otherwise as a justification for a doctrine of maneuver warfare approaches intellectual dishonesty. The assignment of decidedly negative values to the "attritionist" perpetuates the dishonesty. With this selective view of history the maneuverists conducts a subjective analysis of events designed to justify the myth of maneuver warfare. A critical, intelligent analysis of history designed to determine a reliable system of beliefs upon which to base doctrine is sacrificed to perpetuate the illusion. Attrition is not a style of warfare, it is a method: one of the "ways" available to a commander to accomplish his desired "ends" given the constraints of his "means," the political objective, and the practical realities of the terrain and the enemy. The physical destruction of personnel and equipment is a viable and necessary ingredient of warfare. A doctrine that ignores attrition is a doctrine with extremely limited application.

The doctrine of "maneuver warfare" glorifies method at the expense of purpose. The achievement of political objectives using military force must be the unifying focus for doctrine. Policy will determine

the objective, the enemy, the theater of operations, and will impose constraints and restraints upon the use of military force. Any one of these variables can prevent the execution of maneuver warfare. This glorification presents acute problems as the Marine Corps attempts to develop a doctrine for Operational Maneuver From the Sea (OMFTS). The relevance of the Marine Corps is increasing as the world population becomes concentrated on the urban areas of the littoral, yet a doctrine of maneuver warfare is extraordinarily irrelevant given the realities of urban combat. The flaws identified in Fuller's theory---a theory that at least recognized the necessity of battle---are exponentially magnified in a doctrine based on the illusion that an enemy in urban terrain can be convinced to submit because the Marine Corps is moving and thinking fast. Even selective use of history cannot disguise this flaw: never in the history of warfare has urban combat taken any form but attrition. The practical reality is that the Marine Corps is not going to refuse to participate when called upon because the requirements of the mission do not satisfy the tenets of its doctrine. Doctrine must address the wide range of possible missions and circumstances in which that fighting may take place.

Finally, and most importantly, Marines should react with disgust when maneuverists gauge the competency of the Marine Corps in terms of "the 1st (German) Division" or the "Reichswehr-quality" of Marine troops and NCO's. The Marine Corps does not need to justify its doctrine in terms of maneuver warfare, Liddell Hart, William Lind, the Germans, the Israelis, or any other military force. Marine Corps doctrine need only be justified by what the Marine Corps knows to be true about the nature and reality of war. The foundation of that doctrine should be a critical analysis of history---the Marine Corps' and others---that establishes a reliable system of beliefs about what works in war and what does not. Such an analysis will perpetuate a practical response to the varied and dangerous uncertainties of warfare while preserving the strengths of FMFM-1, strengths now free of the constraints of dogma. Such an analysis will reinforce the importance of initiative, but also that initiative exercised in the absence of an understanding of purpose can prove fatal. It will reinforce the importance of mission tactics but also that there are circumstances that demand specific direction. It will reinforce the importance of "reconnaissance pull" but also that a "pull" into a weak spot that is not also a decisive point is a futile waste of assets. It will

reinforce the importance of focus of effort but also that effort must be focused at decisive points and toward an objective and that sometimes that focus will draw you into the teeth of an enemy force.

This new doctrine should emphasize the critical importance of cohesion and esprit; qualities that should be defined in terms of the proud tradition of the Marine Corps. It is these qualities that define the essence of the Marine Corps and these qualities that must be preserved as the Marine Corps looks towards the operational level of war. Most importantly, it is these qualities which lead to victory when war makes necessary---and despite the illusions perpetuated by FMFM-1 it will sometimes be necessary---to close with and destroy a determined enemy by fire and close combat. The leadership, training, and experience that develops and fosters cohesion and esprit must form the bedrock of Marine Corps doctrine.

Hans Delbrueck and James Schneider provide a framework to construct a new capstone doctrine. Delbrueck's emphasis on the subordination of warfare to policy, the practical impact of policy, the enemy, terrain, and purpose, and his wide perspective of military history provides a start point for constructing a reliable system of beliefs. Schneider's theory of the forms and subforms of maneuver and destruction emphasize the importance of maneuver and attrition as the operational tools of war. It is the combination of both, each to its purpose and each to its circumstances, that comprises the operational art. Maneuver is action and in the offense or defense its orientation is either direct or indirect. There are no values attributed to any form or orientation other than the value of purpose: does the way chosen accomplish the ends in an efficient and effective manner consistent with the available means. There are other theorists (Fuller comes to mind), whose thoughts will provide form to the framework. But the qualifying criteria for the inclusion of any of them must rest with the fusion of intellect and practice into practical application on the battlefield. This approach removes emotion from doctrine, and by replacing emotion with reason the illusions of myth are destroyed.

Doctrine, bridging theory to practice, must be based on reason and an understanding of the practical requirements of warfare. FMFM-1 preaches a dogma based on theoretical myth. In its current form this doctrine has no basis in reality, cannot be placed into practice, and has assumed the form of cultism. The Marine Corps must separate itself from this emotional cult and develop a doctrine based on

reason and critical analysis. The alternative is a doctrine with no purpose; a doctrine relegated to the realm of pseudo intellectualism and practical irrelevance.

Endnotes

- ¹ Webster's Third New International Dictionary (1976), s.v., "Myth."
- ² The Oxford Companion to the English Language ed. Tom McArthur (Oxford: Oxford University Press, 1992), 675.
- ³ *Ibid.*, 676.
- ⁴ U.S. Marine Corps, FMFM-1 Warfighting, (Washington D.C.: Department of the Navy, 1989), Forward.
- ⁵ *Ibid.*
- ⁶ *Ibid.*, 30.
- ⁷ *Ibid.*, 37.
- ⁸ *Ibid.*, 59.
- ⁹ *Ibid.*, 19.
- ¹⁰ *Ibid.*, 57
- ¹¹ Websters Ninth New Collegiate Dictionary, (1987), s.v. "Theory." 1223
- ¹² Yehoshavat Harkabi, Theory and Doctrine in Classical and Modern Strategy, Reprinted from Working Paper Number 35, International Security Studies Program, The Wilson Center, 3-10.
- ¹³ James J. Schneider, Theoretical Paper No. 5, The Eye of Minerva: The Origin Nature and Purpose of Military Theory and Doctrine, School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth Ks., 11.
- ¹⁴ Harkabi, 3-12
- ¹⁵ Harkabi's paper is the source for this analysis.
- ¹⁶ Harkabi, 3-14.
- ¹⁷ Carl von Clausewitz On War, ed. and translated by Michael Howard and Peter Paret, (New York: Alfred Knopf, 1993), 698
- ¹⁸ *Ibid.*
- ¹⁹ Yehoshafat Harkabi, a former Major General in the Israeli Army and a lecturer on military affairs at the Hebrew University in Jerusalem, provides a vivid illustration of this point:

To give a concrete example, a common problem in battle is where to place the reserves. If they are located at a considerable distance from the front, they can reach any section of the front, but will have to transverse a long distance to

do so. If they are placed close to the front line, they will have a short journey if needed nearby but will suffer the inconvenience of having to move along the front, under enemy observation and fire if needed elsewhere. Clausewitz thus would explain to the commander the problems associated with the location of the reserves without telling him where to place them, because the commander must make the decision depending on how the battle develops.

Relating this example to the definition of theory, the relationships between the location of the reserve and its ability to influence the battle emerge as principles.

Clausewitz states that "Theory exists so that one need not start afresh each time sorting out the material and plowing through it, but will find it ready at hand and in good order. It is meant to educate the mind of the future commander, or, more accurately, to guide him in his self education, not accompany him to the battlefield; just as a wise teacher guides and stimulates a young man's intellectual development, but is careful not to lead him by the hand for the rest of his life." Clausewitz, 117.

²⁰ Harkabi, 3-13. Jomini believed there existed:

One great principle [which] underlies all the operations of war---a principle which must be followed in all good combinations. It is embraced by the following maxims:

1. To throw by strategic movements the mass of an army, successively, upon the decisive points of a theater of war , and also upon the communications of the enemy as much as possible without compromising one's own.
2. To maneuver to engage fractions of the hostile army with the bulk of one's forces .
3. On the battlefield, to throw the mass of the forces upon the decisive point, or upon that portion of the hostile line which it is of the first importance to overthrow.
4. To so arrange that these masses only be thrown upon the decisive point , but that they shall engage at the proper times and with ample energy.

Henri Jomini, Art of War, in Roots of Strategy Book 2, ed. J.D. Hittle (Harrisburg PA:, Stackpole books, 1987), 486.

²¹ Jomini, Art of War, 437.

²² Schneider, Eye of Minerva, 15.

²³ Julian Corbett, Some Principles of Maritime Strategy, (Annapolis MD:, Naval Institute Press, 1988), 4-5.

²⁴ Joint Chiefs of Staff, Joint Pub 1 Joint Warfare of the Armed Forces, (Washington D.C., National Defense University Press, 1991), 5,6.

²⁵ U.S. Army, FM 100-5 Operations, (Washington D.C., Department of the Army, 1993), 1-1, 1-2.

²⁶ Department of the Navy, Naval Doctrinal Publication 1 Naval Warfare, (Washington D.C.: Department of the Navy, 1994) Forward, ii.

²⁷ U.S. Air Force, Air Force Manual 1-1, Volume 1 Basic Aerospace Doctrine of the United States Air Force, (Washington D.C.: Department of the Air Force, 1992), v, vii.

²⁸ FMFM-1, forward.

²⁹ Ibid., 43.

³⁰ Brigadier General Ohle, Briefing to School of Advanced Military Studies, briefing slide, 6 Feb. 1995.

³¹ FMFM-1, 28.

³² Ibid.

³³ Ibid., 28-29.

³⁴ Ibid., 29.

³⁵ Joint Chiefs of Staff, JCS Pub 1 Department of Defense Dictionary of Military and Associated Terms, (Washington D.C.: The Joint Chiefs of Staff, 1987), 41.

³⁶ FMFM-1, 60.

³⁷ Websters Collegiate Dictionary, s.v. "Tradition."

³⁸ FMFM-1, 59.

³⁹ Ibid.

⁴⁰ Brian Holden Reid, J.F.C. Fuller: Military Thinker, (New York: St. Martin's Press, 1987), 46.

⁴¹ J.F.C. Fuller, Memoirs Of An Unconventional Soldier, (London: Ivor Nicholson and Watson Ltd, 1936), 321.

⁴² Ibid., 322.

⁴³ Ibid.

⁴⁴ Fuller is describing what we now term the "operational level" of war. Fuller's "strategic paralysis," in modern context, is "operational paralysis."

⁴⁵ Ibid., 325-326.

⁴⁶ Ibid., 327.

⁴⁷ Brian Holden Reid, "J.F.C. Fuller's Theory of Mechanized Warfare," The Journal of Strategic Studies, 1 (December 1978): 299-300.

⁴⁸ Ibid., 307

⁴⁹ Ibid., 307-308.

⁵⁰ Ibid., 308.

⁵¹ Ibid.

⁵² Ibid., 309.

⁵³ Ibid., 301, citing J.F.C. Fuller in Armoured Warfare: an annotated edition of Fifteen Lectures on Operations Between Mechanized Forces, (London 1943) 13. The Battle of Totensonntag took place during the closing stages of Britain's Operation "Crusader" in North Africa, November 1943. Rommel counterattacked deep in the British rear creating chaos and causing General Cunningham, GOC 8th Army, to come very close to losing his nerve. The fighting units did not panic however, held on to the German flanks, and eventually forced the Germans to retreat.

⁵⁴ Michael Howard "Military Science in an Age of Peace," Chesney Memorial Gold Medal Lecture Series, 3 October 1973.

⁵⁵ Brian Bond, Liddell Hart A Study of His Military Thought, (London: Cassell Ltd, 1977), 12-34.

⁵⁶ B.H. Liddell Hart, Strategy, (London: Faber and Faber Ltd., 1967), 324.

⁵⁷ Ibid., 323.

⁵⁸ Ibid., 325-326.

⁵⁹ Ibid., 326.

⁶⁰ Ibid., 326-327.

⁶¹ Bond, 56.

⁶² Ibid., 56-57.

⁶³ Ibid., 51. Spencer Wilkinson was a respected Oxford historian. The first occupant of the Chichele Professorship of the History of War at Oxford in 1925, Wilkinson was Hart's most consistent and prolific critic during the interwar years.

⁶⁴ Ibid., 55.

⁶⁵ Ibid., 55-56. Bartholomew is described by Bond as "having one of the best minds on the British General staff during the interwar years."

⁶⁶ Ibid., 55.

⁶⁷ Reid, "JFC Fullers Theory of Mechanized Warfare" 303. "[I]t is necessary not only to circumvent the enemy's front but to fix it, that is to immobilize it. Once this operation is accomplished and the enemy's army is pinned to his position, the next step is to circumvent this fixed front and by rapid movement strike at the enemy's vitals in the rear of it. Should this be accomplished, then this front will be crumbled to pieces."

⁶⁸ Ibid., quoting J.F.C. Fuller in a letter to Liddell Hart, 19 June 1929. Liddell Hart Papers 1/302/36a.

⁶⁹ Ibid., citing J.F.C. Fuller, War and Western Civilization 1832-1932, (London 1932) 220.

⁷⁰ Matthew Cooper, The German Army 1933-1945, (Chelsea MI., Scarborough House/Publishers, 1978), 113-159, 195-242. The conflicting theories of Fuller and Hart are mirrored by the tension in the German Army over the ways in which that war should be prosecuted. The exploits of the German Army, while rooted in fact, have assumed the aura of myth for maneuverists.

Germany attempted to design her armed forces to achieve quick decisive victory. The centerpiece of this design was the Panzer Corps, organized into a combined arms team that included artillery and air power. Behind this limited asset marched straight leg infantry whose rate of attack was determined by the speed of foot movement and the horse drawn carts that provided it supplies. The practical result of this design was an internal contradiction which the German's resolved by adopting the concept of Kesselschlacht or "cauldron battle." The Panzer Corps would penetrate enemy defenses then surge into the enemy's rear to complete an encirclement. The infantry units would follow the armor to close the encirclement after which the air force and artillery would complete the destruction of the now encircled enemy. This process, encirclement and destruction, would be repeated until the opponent's armies were destroyed.

Guderian thought these tactics an absurd use of the demoralizing effect of armor.

⁷¹ William S. Lind, Maneuver Warfare Handbook, (Boulder CO., Westview Press, 1985), 2.

⁷² Ibid., xii. In the introduction Colonel John C. Studdt, USMC compares the effort to Liddell Hart's difficulties stating that "when he was expounding such heretical theories as the 'indirect approach,'" one of Hart's papers was dismissed by an American military journal as "of negative value to the instructors at these schools." Studdt expects "Marine Corps schools to receive this publication with similar enthusiasm."

⁷³ Ibid., 24. This issue comes up in Lind's discussion of why it is important to understand the operational level war. The full context: "Traditionally, American armies have tried attain their strategic objectives by accumulating tactical victories. They have given battle where and whenever it has been offered, wearing the enemy down engagement after engagement. This is attrition warfare on the operational level. Even if each battle is fought according to maneuver principles, operational attrition warfare is inappropriate for the smaller force, because even the best fought battle brings some casualties. Fighting this way, a smaller force can win battle after battle, only to find itself facing yet another battle with no force left to fight it." This statement has the same intellectual and historical validity---none---as the similar quotation from FMFM-1 criticized in Chapter 2 of this paper.

⁷⁴ Ibid., 2. "It is a way of fighting smart, of outthinking an opponent you may not be able to overpower with brute strength."

⁷⁵ Ibid., 5.

⁷⁶ Ibid., 6.

⁷⁷ Ibid., 6-7.

⁷⁸ FMFM-1, 58.

⁷⁹ Ibid., 59

⁸⁰ Ibid., 59-60.

⁸¹ Ibid., 59

⁸² Ibid.

⁸³ FM 100-5 Operations, Glossary-6. FMFM 1-1 Campaigning defines the operational art as the "conceiving, focusing, and exploiting [of] a variety of tactical actions to realize a strategic aim." The author prefers the FM 100-5 definition (adopted by Joint doctrine) believing it better articulates the purpose of the operational art.

⁸⁴ Gordon A. Craig, "Delbruck: The Military Historian," in Makers of Modern Strategy, ed. Peter Paret (Princeton NJ: Princeton University Press, 1986) 331.

⁸⁵ Hans Delbruck, History of the Art of War Within the Framework of Political History Volume IV, translated by Walter J. Renfroe, Jr. (Westport Conn.: Greenwood Press, 1985) x.

⁸⁶ Craig, 326-328.

⁸⁷ Ibid., 336.

⁸⁸ Delbruck, 294.

⁸⁹ Hans Delbruck, Die Strategie des Perikles erläutert durch Strategie Friedrichs des Grossen (Berlin 1890) 27-28; quoted by Craig.

⁹⁰ Delbruck, History of the Art of War Within the Framework of Political History, 295.

⁹¹ James J. Schneider, Theoretical Paper No 3, The Theory of Operational Art, School of Advanced Military Studies, U.S. Army Command and General Staff College, Ft. Leavenworth Ks., 36.

⁹² Ibid.

⁹³ Ibid.

⁹⁴ Ibid.

⁹⁵ Ibid., 37. Schneider notes that the encirclement and flanking movement are variations of the envelopment.

⁹⁶ Ibid., 40. FMFM-I makes no reference to the center of gravity in the body of the manual. "Critical vulnerabilities" is used instead and Clausewitz's center of gravity is referred to in an endnote with a mistaken comment that since Clausewitz used the term to denote the destruction of an opposing enemy force---attrition---the term was not appropriate to a doctrine of maneuver warfare. Clausewitz determined that a center of gravity could be many things: a city, the population, or an enemy force. More importantly, he used the term as a metaphor to describe a phenomena that he observed in the nature of war; namely, that just as in physics a center of gravity draws all things to it and forms the densest of masses so to in war will some "thing" draw all other elements to it and form the densest and most important mass on the battlefield. He never advocated attacking this strength directly but noted that given the nature of war if that which formed the center of gravity could be destroyed then victory was achieved. Clausewitz, as is noted in Chapter 2 of this paper, never intended for his theory to have practical application on the battlefield. Nevertheless, this metaphor has found its way into Joint Doctrine and is defined as "the hub of all power and movement, upon which everything depends. That characteristic, capability, or location from which enemy and friendly forces derive their freedom of action, physical strength, and will to fight." We should be hesitant to use the term in operation orders and directives but the concept provides a useful mental framework for conceptualizing the focus and purpose of military campaigns. To determine a "critical vulnerability" one must still determine what makes a vulnerability

critical. Criticality is determined by the strength a characteristic, capability, or location gives an enemy force. That strength is destroyed by attacking one of its inherent weaknesses so that the mass falls of its own weight. To find a critical vulnerability we must first determine a center of gravity.

⁹⁷ Schneider gives an example of the combinations available to a commander on page 42-43 of Theoretical Paper No. 3. Modified for the Marine Corps, a MEF with two divisions could execute 16 offensive combinations:

<u>Combination</u>	<u>1st Division</u>	<u>2d Division</u>
1	Pin	Pin
2	Pin	Penetrate
3	Pin	Envelop
4	Pin	Exploit
5	Penetrate	Pin
6	Penetrate	Penetrate
7	Penetrate	Envelop
8	Penetrate	Exploit
9	Envelop	Pin
10	Envelop	Penetrate
11	Envelop	Envelop
12	Envelop	Exploit
13	Exploit	Pin
14	Exploit	Penetrate
15	Exploit	Envelop
16	Exploit	Exploit

When the capabilities of the Aviation Combat Element to pin, conduct penetrations, exploitations and vertical envelopment operations are included there is a correspondent increase in the combinations available to a commander (i.e. from 16 to $4^3 = 64$ combinations).

⁹⁸ U.S. Marine Corps, FMFM 1-1 Campaigning, (Washington D.C.: Department of the Navy 1990), 87.

⁹⁹ U.S. Marine Corps, FMFM 2-1 Fighting the MEF, Draft (Quantico Va.: Marine Air-Ground Task Force Instructional Team, 1992) 1-2.

¹⁰⁰ William S. Lind, "What Great Victory? What Revolution," Net Call, Volume 1, Number 2 (Association of Advanced Operational Studies, Fall-Winter 1993) 27.

¹⁰¹ Ibid.

¹⁰² John Schmitt, "Out of Sync with Maneuver Warfare," Marine Corps Gazette 78 (August 1994): 21.

¹⁰³ Ibid., 22.

Bibliography

Government Publications

- Department of the Army. FM 100-5 Operations. Washington D.C.: Department of the Army, 1993.
- Department of the Navy. Naval Doctrinal Publication 1 Naval Warfare. Washington D.C.: Department of the Navy, 1994.
- Joint Chiefs of Staff. Joint Pub 1 Joint Warfare of the Armed Forces. Washington D.C.: National Defense University Press, 1991.
- Office of the Chairman, Joint Chiefs of Staff. JCS Pub 1-02 Department of Defense Dictionary of Military and Associated Terms. Washington D.C.: GPO, 1989.
- United States Air Force. Air Force Manual 1-1 Volume 1 Basic Aerospace Doctrine of the United States Air Force. Washington D.C.: Department of the Air Force, 1992.
- United States Marine Corps. FMFM-1 Warfighting. Washington D.C.: Department of the Navy, 1989.
- _____. FMFM 1-1 Campaigning. Washington D.C.: Department of the Navy, 1990.
- _____. FMFM 2-1 Fighting the MEF (Draft). Quantico VA.: MAGTF Instructional Team, 1992.
- _____. Operational Maneuver From the Sea (Concept Paper). Quantico VA.: U.S. Marine Corps, 1994.

Articles

- Lind, William S. "What Great Victory? What Revolution?" Net Call 1 (Fall-Winter 1993): 24-28.
- McKenzie, Kenneth F. "They Shoot Synchronizers Don't They?" Marine Corps Gazette 78 (August 1994): 30-33.
- Reid, Brian Holden. "J.F.C. Fuller's Theory of Mechanized Warfare" The Journal of Strategic Studies 1 (December 1978): 295-310.
- _____. "J.F.C. Fuller and B.H. Liddell Hart A Comparison" Military Review LXX (May 1990): 64-73.
- Schmitt, John S. "Out of Sync With Maneuver Warfare" Marine Corps Gazette 78 (August 1994): 16-22.

Books

- Bond, Brian. Liddell Hart: A Study of His Military Thought. London: Cassell Ltd, 1977.
- Clausewitz, Carl von. On War. Trans. and ed. Michael Howard and Peter Paret. New York: Albert Knopf, 1993.
- Cooper, Matthew. The German Army 1933-1945. Chelsea MI.: Scarborough House/Publishers, 1978.
- Corbett, Julian. Some Principles of Maritime Strategy. Annapolis MD.: Naval Institute Press, 1988.

- Delbruck, Hans. History of the Art of War Within the Framework of Political History Volume IV: The Modern Era. Trans. by Walter J. Renfroe. Westport Conn.: Greenwood Press, 1985.
- Fuller, J.F.C. Memoirs Of An Unconventional Soldier London: Ivor Nicholson and Watson Ltd., 1936.
- Hart, B.H. Liddell. Strategy. London: Faber and Faber Ltd., 1967.
- Jomini, Henri. Art of War in Roots of Strategy Book 2. Ed. J.D. Hittle. Harrisburg PA.: Stackpole Books, 1987.
- Lind, William S. Maneuver Warfare Handbook. Boulder CO.: Westview Press, 1985.
- McArthur, Tom, editor. The Oxford Companion to the English Language. Oxford: Oxford university Press, 1992.
- Paret, Peter, editor. Makers of Modern Strategy. Princeton N.J.: Princeton University Press, 1986.
- Webster's Ninth New Collegiate Dictionary. Springfield MASS.: G&C Merriam Company, 1976.
- Webster's II New Riverside Dictionary. Boston: Houghton Mifflin, 1988.

Papers

- Harkabi, Yehoshavet. Theory and Doctrine in Classical and Modern Strategy. Working Paper Number 35, International Security Studies Program, The Wilson Center.
- Schneider, James, J. Theoretical Paper No. 3 The Theory of Operational Art. School of Advanced Military Studies, U.S. Army command and General Staff College, Fort Leavenworth KS.
- _____. Theoretical Paper No. 5 The Eye of Minerva: The Origin, Nature, and Purpose of Military Theory and Doctrine. School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth KS.

Lectures

- Howard, Michael. "Military Science in an Age of Peace." Chesney Memorial Gold Medal Lecture Series, 3 October 1973.

Briefings

- Brigadier General Ohle. Briefing to the School of Advanced Military Studies, briefing slide, 6 February 1995.